"entrenched landline telephone interests which will continue to assign numbers in ways that suit their own interest[s] without accountability or oversight."58 Others arque that nondiscriminatory assignment of non-geographic codes should be addressed by their proposed Advisory Council. 59 MCI nondiscriminatory assignment as a policy issue and thus believes that the Commission should address this issue directly and instruct the industry and the NANP Council to develop guidelines which provide appropriate criteria for assignments which do discriminate based on industry affiliation.

MCI reiterates that PCS numbering should be viewed in terms of facilitating near-term development of PCS options, while concurrently looking toward longer-term evolution of the service. Therefore, MCI disagrees with SWBT's contention that it would be "premature and unwise" to consider numbering schemes for PCS development. On the contrary, PCS is an evolving service with near-term applications, and this development should not be hindered by parties who may not fully support that vision today. MCI shares Cox's concerns that "outmoded forms of thinking about numbering will stifle progress."

MCI agrees with Cox that providers of future PCS may have requirements for both traditional and non-geographic codes. As Cox

⁵⁸ Comments of Cox at 14.

⁵⁹ Comments of PacTel 13; PageNet at 9.

⁶⁰ Comments of SWBT at 12.

⁶¹ Comments of Cox at 13.

notes, non-geographic codes may potentially be useful to highly mobile users of PCS, but there may be forms of PCS for which traditional numbering will be more suitable. 62

MCI recognizes the need for PCS standards. MCI agrees with Cox that numbering guidelines must be completed promptly so that numbers will be available when PCS providers are ready to provide service. However, numbering guidelines must not impede the development of PCS. Indeed, development of PCS standards has been ongoing for several years now, and no end of discussions is evident. MCI disagrees with commenters who claim that the industry bodies should be given more time to analyze the future PCS marketplace and to develop guidelines before the FCC takes action on numbering approaches for longer-term PCS. The industry fora are aware that PCS is being developed and that there is an immediate need for standards. MCI and others have made an urgent appeal to Bellcore for numbering resources.

GTE, BellSouth and Telocator note that an ICCF industry workshop has been formed to establish guidelines for non-geographic assignment of SACs for PCS. 66 Ameritech further notes that the CCITT and the T1 Committee of the Exchange Carrier Standards

⁶² Comments of Cox at 14-15.

⁶³ Comments of Cox at 15.

⁶⁴ Comments of BellSouth at 14; SWBT at 12; and Bell Canada at 5-6.

⁶⁵ Comments of Letter from MCI to Bellcore, dated Nov. 30, 1992.

⁶⁶ Comments of GTE at 15; BellSouth at 14; Telocator at 13.

Association are also examining PCS standards. What these commenters fail to point out is the ineffectiveness of the current process in which issues have been fragmented and are discussed in numerous venues. This partitioning of the subject has resulted in a lack of substantive progress and delay in both the implementation of PCS services and associated planning processes by PCS providers. MCI supports industry discussions of PCS numbering issues but requests reorganization and centralization of these discussions in an ad hoc industry forum within the CLC process, until the NANP Council structure is established. MCI agrees with NYNEX that the Commission should be available to advise industry participants of policy positions to be assumed if they arrives at an impasse during this PCS development process. 67 Furthermore, the FCC should assume a more active role in overseeing these critical activities to ensure progress is not delayed on PCS issues and to enable it to adopt policies consistent with industry needs.

MCI's NANP Council proposal would facilitate such involvement, on a going-forward basis, for any other numbering issue or topic under discussion by the industry. MCI agrees with Cox that since longer-term PCS uses have not yet been determined, the Commission should maintain flexible policies to better enable PCS providers to serve their customers. 68

It is apparent that some commenters are linking PCS numbering

⁶⁷ Comments of NYNEX at 8.

⁶⁸ Comments of Cox at 15.

with the concept of portability.⁶⁹ Other commenters simply encourage the Commission to promote development of portable numbering.⁷⁰ As MCI stated in its initial comments in this docket, number portability is one of the potential attributes of PCS in the longer-term.⁷¹ However, MCI cautions the Commission not to assume that PCS will necessarily use portable numbering to the exclusion of fixed numbering. The cost/benefit analysis of PCS number portability remains a future consideration.

One important portability issue that would need to be examined by the industry is access to the numbering database. GTE supports a shared database for PCS on the order of the database currently being developed for 800 services. GTE recommends that the industry prepare guidelines for a shared-database environment, but also notes that NXX codes will need to be assigned, as an interim measure, so as not to deny current access to numbering resources. MCI agrees that NXXs need to be assigned in the near-term. MCI disagrees with GTE that the numbering resource can only be used efficiently in a shared-database environment. The issue of a shared database for SAC numbering raises more questions than it answers. Issues such as database ownership, database location,

⁶⁹ Comments of Cox at 13; Metrocall at 6-7;

Comments of Cox at 13; GTE at 15-17; Illinois at 5-6; NY Department of Public Service at ____.

⁷¹ Comments of MCI Comments at 32.

⁷² Comments of GTE at 17.

⁷³ Comments of GTE at 16.

database centralization or decentralization, and international access require further study.

IV. Local Number Portability

Before a meaningful discussion can take place on this subject, the concept of "local number portability" needs to be defined and distinguished from the various other concepts of number portability. It is apparent that there is some confusion in the comments about the different types of number portability. The Commission's Notice has asked for comments on "local number portability" only, and MCI uses the language of the Notice to frame its responses here. The contract of the notice to frame its responses here.

For purposes of this discussion, MCI considers local number portability (LNP) to be the ability of the customer to move from one local service provider to another within the same geographic area. MCI further defines "service" as local exchange common carriage. Teleport describes the geographic area as the local numbering plan area (NPA). These definitional issues can be debated more extensively in a rulemaking proceeding established to review local number portability.

MCI agrees with the broad segment of commenters urging the FCC

Comments of US West, Phase I, at 1-4.

Comments of Bell Atlantic at 4; Bell Canada at 5; New York DPS at 1; North Pitt. Tel. at 3; US West at 1-3.

⁷⁶ <u>See</u> Comments of GTE at 18; NYNEX at 8; US West at 2 ("number retention portability" option).

Comments of Teleport at 6-7.

to explore the concept of local number portability. MCI concurs, in principle, with the several commenters who argue that the issues relating to technical and economic feasibility of accomplishing LNP should be fully examined. 79

Some commenters contend it is premature to make decisions with respect to local number portability. BellSouth and GTE argue that the industry must be allowed to develop technical functionalities to avoid network inefficiencies and to control costs. It is interesting that some commenters, mostly local exchange carriers, are claiming that local number portability is too costly, too complex, or nearly infeasible. The Commission should consider these views in the context in which they are given. To state the obvious, it is in the business interest of these LECs to make such claims because to admit that local number portability is feasible would open the door to competition in their

Comments of Bell Atlantic, McCaw, New York DPS at 1; NYNEX at 8-9; Teleport at 6-8.

Comments of CSCN at 1, Illinois, PageNet at 9-10; Sprint at 11; USTA at 14.

⁸⁰ Comments of SNET at 8; SWBT at 13-14.

Comments of BellSouth at 16-17.

⁸² Comments of GTE at 19.

⁸³ Comments of Bell Atlantic at 5 n.6, Sprint at 9-10.

Comments of BellSouth at 16, SNET at 8-9; SWB at 13; Bell Canada at

As noted by North Pittsburgh Telephone, "[t]he matter of local number portability immediately causes alarm in the LEC community." Comments of North Pitt. Tel. at 3.

service territories.

MCI is concerned that the industry is not preparing for local number portability. As McCaw notes, Bellcore's Long Range Numbering Plan does not even mention local number portability. MCI agrees with Centel that the industry should examine the issues related to LNP, 87 but believes that FCC action is imperative since the industry is not moving forward with studies of the issues related to LNP. Although certain options for number portability for specific applications such as PCS are being discussed in industry fora, these industry discussions need not prevent the FCC from concurrently reviewing local number portability.

Several parties argue that database technology will be needed to provide LNP. 88 MCI believes that the FCC should oversee the industry's discussions of issues related to design and implementation of the local number database. GTE states that the industry should prepare guidelines for assignment of numbers from a shared database. 89 MCI considers GTE's plan to be premature since the FCC has not yet determined policy on the matter of local number portability.

Furthermore, judging from the industry's experience with implementing the 800-number database, it is unlikely that the

⁸⁶ Comments of McCaw at 20.

⁸⁷ Comments of Centel at 3.

Comments of BellSouth at 16; SNET at 9; NYNEX at 9; PacTel at 13.

⁸⁹ Comments of GTE at 18.

interested parties will be able to resolve these database issues on their own. MCI suggests that the FCC direct an appropriate industry forum to consider issues of design and implementation and to report its findings and conclusions back to the FCC. The FCC would then be in a position to balance all considerations and to make the final decisions.

One of the most important database issues the FCC should decide is who will control the local number database. No service provider with a stake in serving the local exchange market can be entrusted with stewardship of the local database because there would be a clear conflict of interest. Other database issues which must be examined include the size and reliability of the database, and the speed of database query, as noted by GTE. 90

In addition to the database, other technical issues remain to be resolved before LNP can be made widely available. Many parties argue that advanced routing technologies and support systems will be required to provide LNP. 91 GTE claims that several network architectures are candidates for portability, but all would require modifications to switch hardware and software. 92 The types of numbers available for LNP must also be discussed. GTE states that LNP could be provided using either traditional or non-geographic

One major failure of GTE's plan is that it does not address how inbound international calls would be routed using a database approach to LNP.

⁹¹ Comments of BellSouth at 16, GTE, NYNEX at 9; SNET at 8-9; Sprint at 10, USTA at 14.

Comments of GTE at 19.

numbering.93

Ameritech expresses its willingness to develop local number portability options using new technologies, such as the Advanced technologies (AIN), as these become Intelligent Network "technically feasible and where supported by sufficient demand to cover the costs of developing and operating the service."4 Teleport argues that local portability could be efficiently and cost-effectively implemented when the LECs deploy SS7 and AIN capabilities in their networks.95 It contends that number portability is expected to be a "normal AIN feature" to facilitate portability among the LECs' central offices and argues that the additional cost of implementing LNP should be minimal. technology is still on the drawing board and no schedule for implementation is available. Thus, this proposal is of no practical benefit to providers or consumers waiting for local number portability.

Apart from technical issues, the benefits and costs of LNP should be examined. Lack of local portability presents impediments to local competition. MFS, Teleport and Illinois state that it is inconvenient and costly for consumers to change telephone numbers. The market issues and logic leading to the Commission ordering 800-number portability are relevant to what the Commission

⁹³ Comments of GTE at 18.

Comments of Ameritech at 12-13.

⁹⁵ Comments of Teleport at 7-8.

 $^{^{96}}$ Comments of Illinois at 8.

must also do for local number portability if it truly wants to encourage the development of local competition.

Conversely, local number portability will give customers the freedom to use their assigned numbers to obtain the best service and price combination from among competing carriers. 97 MCI agrees with Teleport and MFS that LNP is an important component of competition in the local switched services marketplace. 98 The Illinois Commission accurately observes that local number portability would be "a significant step in lowering the barriers to entry in local telecommunications. "99 An additional benefit of LNP might be conservation of scarce number resources. MCI agrees with McCaw and Teleport that LNP could conserve numbers because numbers could be assigned among switches and carriers, rather than in NXX blocks of 10,000 to individual carriers. 100

MFS and Sprint note that local portability will involve significant financial investment but suggest that the costs of developing LNP capability could be recovered in an equitable and nondiscriminatory manner from participating carriers. MFS argues that these costs must be balanced against the substantial benefits that will result from "creating the necessary technical"

⁹⁷ Comments of Teleport at

⁹⁸ Comments of MFS at 6; Teleport at 7.

⁹⁹ Comments of Illinois at 7.

¹⁰⁰ Comments of McCaw at 20; Teleport at 7.

¹⁰¹ Comments of Sprint at 10.

conditions for vibrant local telephone competition."102

Finally, the Commission's Notice asked parties to discuss the industry's experience with 800 number portability. MCI concurs with several commenters that 800 portability experiences should be examined. While there are technical differences between local number portability and 800 portability, the pre 800 portability marketing barriers have significant parallels in the local portability environment. Examining these parallels should provide insights into how much of a barrier to enter the lack of portability may be to emerging alternative local exchange common carriage service providers. However, it is premature to determine how valuable those insights may be since 800 portability has not yet been implemented in the marketplace. It should be noted that each service has its own unique characteristics, hence number portability must be examined on a service specific basis.

It is obvious from the disparate points of view on LNP, and the various technical aspects thereof, that there is no agreed approach for implementing LNP. In addition the fact that this issue is only indirectly mentioned in Bellcore's proposed long range numbering plan is of particular concern. Also, it speaks volumes about the urgency for the commission to initiate a rulemaking proceeding to start the process of investigating the numerous technological and economic issues related to local number

¹⁰² Comments of MFS at 9.

Comments of Illinois, MFS at 8; North Pitt. Tel. at 3-4; Rochester at 4; Sprint at 10.

portability.

Conclusion

Accordingly, MCI requests the Commission to transfer administration of the NANP into two separate entities not affiliated with any industry group. MCI proposes funding the NANP activities through membership contributions equitably drawn from all NANP participants. MCI supports assignment of non-geographic Service Access Codes for near-term PCS and favors non-geographic NPAs for the longer-term deployment of PCS. And, MCI urges promptly addressing the issues related to local number portability.

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